

April 12, 1996

MEMORANDUM

TO: Orville D. Green, Assistant Administrator
Permits and Enforcement

FROM: Brian R. Monson, Chief *BRM*
Operating Permits Bureau

SUBJECT: Issuance of Tier II Operating Permit #029-00008 to
Soda Springs Phosphate, Incorporated (SSP), Soda Springs, Idaho

PURPOSE

The purpose of this memorandum is to satisfy the requirements of IDAPA 16.01.01 Sections 400 through 406 (Rules for the controls of Air Pollution in Idaho) for issuing Operating Permits (OP).

PROJECT DESCRIPTION

This project is for the issuance of a Tier II OP for Soda Springs Phosphate (SSP), located at Soda Springs, Idaho, in order to establish the facility as a synthetic minor source. In addition to the scrubber stack, the emissions sources of the facility are the screens, hammer mill, conveyers, transfer points, and ore and product handling. Fugitive emissions from unpaved roads are considered part of the stockpiles emissions because the facility is very close to the County road.

SUMMARY OF EVENTS

On June 8, 1995, the Division of Environmental Quality (DEQ) received the Tier II OP application for SSP, Soda Springs, Idaho. Additional information was received on August 17, 1995. On November 9, 1995 DEQ staff met with the facility owner, J. Hatfield, and the facility Consultant, J. Reeve, of Reeve and Associates, where issues related to the Tier II permit application and the facility's potential to emit were resolved. More information was received on November 15, 1995. The application was declared complete on November 15, 1995. Supplemental information was received on January 5, 1996. On January 16, 1996, a proposed Tier II OP was issued for public comment. A public comment period was then held from January 26, 1996, to February 26, 1996.

On February 26, 1996, DEQ received comments about the content of the proposed OP. These comments were addressed by DEQ in the response package.

RECOMMENDATIONS

Based on the review of the OP application, and on applicable state and federal regulations concerning the permitting of air pollution sources, the Bureau staff recommends that SSP, Soda Springs, Idaho, be issued a Tier II OP. Staff also recommends that the facility be notified in writing of the obligation to pay permit application fees for the Tier II permit.

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cc: G. Spinner, SEIRO
OP File Manual
Source File
COF

January 16, 1996

MEMORANDUM

TO: Brian R. Monson, Chief *B. Monson*
Operating Permits Bureau, Permits and Enforcement

FROM: Camille D. Ajaka, Air Quality Engineer *c d a*
Operating Permits Bureau

THROUGH: Susan J. Richards, Air Quality Permits Manager
Operating Permits Bureau

SUBJECT: Technical Analysis for Proposed Tier II Operating Permit #029-00008,
Soda Springs Phosphate, Incorporated (SSP), Soda Springs, Idaho

PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 16.01.01 Sections 400 through 406 (Rules for the Control of Air Pollution in Idaho) for issuing Operating Permits (OP).

FACILITY DESCRIPTION

Soda Springs Phosphate, Inc. (SSP), Soda Springs, Idaho, is a phosphate granulation facility, which granulates raw material (powdered phosphate ore or gypsum) by mixing it with lignosulfonate and molasses. Raw material is delivered to the facility by dump trucks. Raw material is transferred from stockpiles by a front-end loader to the feed shaker screen that leads to the feeder belt, the feeder bin, the pan feeder, the feed belt, and then to the pug mill. Lignosulfonate powder is delivered by cars where it is pumped to a storage tank. Lignosulfonate is mixed with molasses in the mix tank to form a binder which is pumped to the pug mill where it is milled with the raw material. The product then leaves to a granulator, a dryer, dryer belt, then to the cooler. Emissions from the dryer and the cooler are controlled by two (2) dry cyclones and a wet cyclone connected in series with three wet scrubbers. After that the product is transferred to the cooler discharge belt, the cooler extension belt, and then to a set of three screens, the Rotex screen, the hammer screen and the mini product screen. Oversize product is transferred to the oversize belt which leads to the hammer mill. Products from the screens are transferred to the product storage via the product belt and the mini product belt. The fines are recycled to the feed belt through the fines return belt. Loading of the product is made by a front-end loader that transfers the product to the loadout shaker, the loadout belt, then to trucks or cars. Products from the hammer mill pass through a multicloner that leads to the cooler.

Project Description

This project is for an OP for the following existing point and fugitive emissions sources:

Point Sources:

- (1) Scrubber Stack: Emissions from the scrubber stack are controlled by the following:

Name	Manufacturer	Size	Speed	Capacity
Cyclones (2) (dry)				
Cyclone (wet)				
Scrubber Pump #1	Barkley	4" x 3"	3600 rpm	360 GPM
Scrubber Pump #2	Gallagher	Sump x 3"	1500 rpm	200 GPM
Scrubber Pump #3	Gallagher	Sump x 3"	1500 rpm	200 GPM
Multicloner			1200 rpm	10000 CFM
High Pressure Pump	Hypro	Diaphragm	350 rpm	17 GPM

The stack parameters are the following:

UTM-X Coordinate (KM)	452.3
UTM-Y Coordinate (KM)	4724.8
Stack Exit Height (ft)	60
Stack Exit Diameter (ft)	8
Stack Exit Flow Rate (ACFM)	19,300
Stack Exit Temperature (°F)	95

(2) Screens

Name	Manufacturer	Size	Speed	Capacity
Feed Shaker	Cedar Rapids	4' x 10'	900 rpm	12 tph
Rotex	S/A, #80	5' x 7'	227 rpm	12 tph
Hummer		4' x 10'	950 rpm	8 tph
Mini Product		2.5' x 3.5'	1200 rpm	3 tph
Load Out	Tyler-3-Deck	5' x 10'	960 rpm	30 tph

Fugitive Sources:

- (1) Ore unloading, piling, stockpiles, and feeding
- (2) Product loading

A more detailed process and equipment description can be found in the operating permit application materials and in the facility's source file.

SUMMARY OF EVENTS

On June 8, 1995, the Division of Environmental Quality (DEQ) received a Tier II operating permit application for (SSP), Soda Springs, Idaho. Additional information was received on August 17, 1995. On November 9, 1995, DEQ staff met with the facility owner, J. Hatfield, and the facility Consultant, J. Reeve, of Reeve and Associates, where issues related to the Tier II permit application and the facility's potential to emit were resolved. More information was received on November 15, 1995, and January 5, 1996.

DISCUSSION

1. Emission Estimates

Emission estimates were provided by SSP. The calculations were resubmitted by the applicant according to DEQ request. DEQ also estimated the emissions from all the sources of the facility (attached spreadsheet). Calculations were based on the maximum production rate of the dryer, twelve (12) tons per hour.

Emissions from the dryer, pug mill, granulator, cooler, screens, transfer points, milling, and ore and product handling were estimated by using either the corresponding emissions factors or the predictive equation furnished by the 5th edition of AP-42. Emissions from stockpiles were estimated using emissions factors from the 4th edition of AP-42 (not available in the 5th edition). A particulate matter control efficiency of 97% was assumed for the use of the wet scrubber, provided by Section 8.5.2 of AP-42. A control efficiency of 50% was assumed for using of water or dust suppressants.

2. Modeling

No modeling for impact analysis for the various emissions from the facility's point sources was performed.

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3. Area Classification

SSP - Soda Springs, Caribou County, Idaho, is located in AQCR 61. The area is classified as attainment or unclassifiable for all criteria air pollutants.

4. Facility Classification

SSP - Soda Springs, Idaho is not a designated facility as defined in IDAPA 16.01.01.006.25. The facility is classified as an A2 source because the actual emissions of any criteria pollutant is less than 100 tons per year.

5. Regulatory Review

This operating permit is subject to the following permitting requirements:

a.	<u>IDAPA 16.01.01.401</u>	Tier II Operating Permit
b.	<u>IDAPA 16.01.01.403</u>	Permit Requirements for Tier II Sources
c.	<u>IDAPA 16.01.01.404.01(c)</u>	Opportunity for Public Comment
d.	<u>IDAPA 16.01.01.404.04</u>	Authority to Revise or Renew Operating Permits
e.	<u>IDAPA 16.01.01.406</u>	Obligation to Comply
f.	<u>IDAPA 16.01.01.470</u>	Permit Application Fees for Tier II Permits
g.	<u>IDAPA 16.01.01.625</u>	Visible Emission Limitation
h.	<u>IDAPA 16.01.01.650</u>	General Rules for the Control of Fugitive Dust
i.	<u>IDAPA 16.01.01.700</u>	Particulate Matter -- Process Weight Limitations
j.	<u>IDAPA 16.01.01.775</u>	Rules for Control of Odor

FEES

Fees apply to this facility in accordance with IDAPA 16.01.01.470. The facility is subject to permit application fees for Tier II permits of five hundred dollars (\$500.00). IDAPA 16.01.01.470 became effective on March 7, 1995.

RECOMMENDATIONS

Based on the review of the Tier II OP application and of applicable state and federal regulations concerning the permitting of air pollution sources, staff recommends that SSP - Soda Springs, Idaho, be issued a Tier II OP for the sources that are described in the facility's permit application. An opportunity for public comment on the air quality aspects of the proposed permit shall be provided as required by IDAPA 16.01.01.404.01. Staff also recommends that the facility be notified of the Tier II permit fee requirement in writing. This fee will be applicable upon issuance of the permit.

BRM/SJR/CDA/rj permit\sodasprg\springs.TAM

cc: G. Spinner, SEIRO
Source File
COF

Soda Springs Phosphate, Inc.
P.O. Box 578
Soda Springs, ID 83276

Contact Person: Lynn Moore
OP #: 029-00008

Tier II application Information

Production Data

Max. Hourly Rate (tph) 12
Act. Hourly Rate (tph) 5
Oversize product (tph) 4

Dryer Data

Max. Combustion Rate (ft³/hr) 6000
Annual Combustion Rate (ft³/yr) 5.3E+07
N. G. Heat Content (Btu/ft³) 1050

Source	Pollutant	E. F.	Unit	Reference	Control Equipment	Eff. %	E. Rate lb/hr	Op. Time hr/yr	E. Rate tons/yr
PugMill, Granulator, Dryer, Cooler	PM	3.333	lb/ton	T 8.5.2-1, 5th	Wet Scrubbers	97	1.200	8760	5.255
	PM-10	2.667	lb/ton	T 8.5.2-1, 5th	Wet Scrubbers	97	0.960	8760	4.205
	Fluorides	8	lb/ton	T 8.5.2-1, 5th	Wet Scrubbers	97	2.880	8760	12.614
Screen (Rotax)	PM	0.0393	lb/ton	T 11.19.2-2, 5th	Dust Suppressant	50	0.473	8760	2.070
	PM-10	0.015	lb/ton	T 11.19.2-2, 5th	Dust Suppressant	50	0.180	8760	0.788
Fine Screens (Hummer, Mini)	PM	0.1863	lb/ton	T 11.19.2-2, 5th	Dust Suppressant	50	1.491	8760	8.531
	PM-10	0.071	lb/ton	T 11.19.2-2, 5th	Dust Suppressant	50	0.568	8760	2.488
Conveyor Transfer (10 Pts. to SC)	PM	0.0036	lb/ton	T 11.19.2-2, 5th	Dust Suppressant	50	0.221	8760	0.966
	PM-10	0.0014	lb/ton	T 11.19.2-2, 5th	Dust Suppressant	50	0.084	8760	0.368
Conveyor Transfer (8 Pts. from SC) (assume half load)	PM	0.0036	lb/ton	T 11.19.2-2, 5th	Dust Suppressant	50	0.088	8760	0.386
	PM-10	0.0014	lb/ton	T 11.19.2-2, 5th	Dust Suppressant	50	0.034	8760	0.147
Conveyor Transfer (loadout) at 30 tph rate	PM	0.0036	lb/ton	T 11.19.2-2, 5th	Dust Suppressant	50	0.055	8760	0.241
	PM-10	0.0014	lb/ton	T 11.19.2-2, 5th	Dust Suppressant	50	0.021	8760	0.092
Hammer Mill (fines crushing)	PM	0.0393	lb/ton	T 11.19.2-2, 5th	Dust Suppressant	50	0.059	8760	0.259
	PM-10	0.015	lb/ton	T 11.19.2-2, 5th	Dust Suppressant	50	0.023	8760	0.099

$E = k(0.0023)(U/5)^{-1.3}(M/2)^{-1.4}$									
$U = 7.8 \text{ mph}$									
$M_O = 4.8 \%$									
$M_D = 0.5 \%$									
Ore Piling	PM	0.0012	lb/ton	T 11.19.2-2, 5th	Moisture Content	0	0.014	8760	0.063
	PM-10	0.0004	lb/ton	T 11.19.2-2, 5th	Moisture Content	0	0.005	8760	0.022
Ore Feeding	PM	0.0012	lb/ton	T 11.19.2-2, 5th	Moisture Content	0	0.014	8760	0.063
	PM-10	0.0004	lb/ton	T 11.19.2-2, 5th	Moisture Content	0	0.005	8760	0.022
Feed Shaker Screen	PM	0.0393	lb/ton	T 11.19.2-2, 5th	Dust Suppressant	50	0.236	8760	1.035
	PM-10	0.015	lb/ton	T 11.19.2-2, 5th	Dust Suppressant	50	0.090	8760	0.394
Product Loading	PM	0.0285	lb/ton	T 11.19.2-2, 5th	Moisture Content	0	0.343	8760	1.501
	PM-10	0.0099	lb/ton	T 11.19.2-2, 5th	Moisture Content	0	0.120	8760	0.525
Product Loadout Shaker Screen	PM	0.0393	lb/ton	T 11.19.2-2, 5th	Dust Suppressant	50	0.236	8760	1.035
	PM-10	0.015	lb/ton	T 11.19.2-2, 5th	Dust Suppressant	50	0.090	8760	0.394

Source	Pollutant	E. F.	Unit	Reference	Control Equipment	Eff. %	E. Rate lb/hr	Op. Time hr/yr	E. Rate tons/yr
Dryer's Combustion Emissions	PM	12	lb/Mcf	T 1.4-1, 5th	none	97	0.002	8760	0.009
	PM-10	12	lb/Mcf	T 1.4-1, 5th	none	97	0.002	8760	0.009
	SO ₂	0.6	lb/Mcf	T 1.4-2, 5th	none	0	0.004	8760	0.016
	NO _x	100	lb/Mcf	T 1.4-2, 5th	none	0	0.600	8760	2.628
	CO	21	lb/Mcf	T 1.4-2, 5th	none	0	0.126	8760	0.552
	VOC	5.28	lb/Mcf	T 1.4-3, 5th	none	0	0.032	8760	0.139

Source	Pollutant	E. F.	Unit	Reference	Control Equipment	Eff. %	Pile Area Acre	Op. Time days	E. Rate tons/yr
Active Stockpiles	PM	13.2	lb/ac/dy	T 8.19.1-1, 4th	Dust Suppressant	50	0.574	280	0.530
	PM-10	6.3	lb/ac/dy	T 8.19.1-1, 4th	Dust Suppressant	50	0.574	280	0.253
Inactive Stockpiles	PM	3.5	lb/ac/dy	T 8.19.1-1, 4th	Dust Suppressant	50	0.574	85	0.043
	PM-10	1.7	lb/ac/dy	T 8.19.1-1, 4th	Dust Suppressant	50	0.574	85	0.021

Emissions from Scrubber Stack		lb/hr	tons/yr
PM		1.202	5.265
PM-10		0.962	4.215
SO ₂		0.004	0.016
NO _x		0.600	2.628
CO		0.126	0.552
VOC		0.032	0.139

Emissions from Screening, Conveying, and Milling		lb/hr	tons/yr
PM		2.386	10.452
PM-10		0.909	3.982

Emissions from Ore Unloading, Piling, Stockpiles, and Feeding		lb/hr	tons/yr
PM		1.413	1.734
PM-10		1.248	0.712

Emissions from Product Loading		lb/hr	tons/yr
PM		0.579	2.536
PM-10		0.210	0.919

Response to Comments Submitted During a Public Comment Period on
Soda Springs Phosphate, Incorporated (Soda Springs)
Proposed Tier II Operating Permit (OP) for the Entire Facility

COMMENTS AND RESPONSES

COMMENT #1: Page 2, paragraph 1: The proposed Tier II Operating Permit (OP) for the Soda Springs Phosphate (SSP) plant fails to include significant controls as required by IDAPA 16.01.01.400.

DEQ RESPONSE: Section 400 of the Rules for the Control of Air Pollution in Idaho does not, in fact, require facilities to apply significant controls. Rather, the Department is required to determine whether the source would comply with all applicable local, state, or federal emissions standards (see IDAPA 16.01.01.403.01).

SSP's proposed Tier II OP, Section 2 of Scrubber Stack, requires SSP to operate and maintain a wet scrubber that controls emissions from the pugmill, the granulator, the dryer, and the cooler. The permit also lists an opacity limit on that scrubber stack. It also sets visible emissions limits on the fugitives from the pug mill and the granulator. The Operating Requirements section of the Scrubber Stack requires the facility to:

1. Limit the hourly production rate;
2. Maintain the pressure drop of the wet scrubber within the manufacturer's specifications;
3. Maintain the water flow to the scrubber at a certain level;
4. Operate the high pressure pump when visible emissions exceed 10%;
5. Add fresh water to the scrubbing media when visible emissions exceed 10%; and
6. Install monitoring equipment to continuously measure the pressure drop across the scrubber, and the water flow rate to the scrubber.

The proposed Tier II OP requires the facility to monitor and record the pressure drop, scrubbing media flow rate, and the fresh water flow rate to the wet scrubber on a daily basis.

The proposed Tier II OP also requires the facility to have emissions and opacity limits on the screening, conveying, milling, ore unloading, ore piling, stockpiles, ore feeding, and product loading operations. It requires the facility to record on a daily basis the control measures used to keep the emissions and the opacity at the limited levels.

The above requirements will assure that SSP will be operating in compliance with federal and state rules.

COMMENT #2: Page 2, paragraph 2: The Division of Environmental Quality (DEQ) has allowed SSP to operate out of compliance since February 25, 1991, the date DEQ received notice that SSP changed its process from a mixture of precipitator dust and sulfuric acid to one containing rock phosphate and lignosulfonate.

DEQ RESPONSE: The proposed Tier II OP does not excuse any past non-compliance. SSP is an existing facility (in operation since 1972). Beginning in 1972, the facility processed treater dust and sulfuric acid. The only applicable requirements for SSP were process weight rate (IDAPA 16.01.01.700), the opacity limit (IDAPA 16.01.01.625), odors control (IDAPA 16.01.01.775), and reasonable control of fugitive dust (IDAPA 16.01.01.650).

On August 28, 1986, SSP was issued a Permit to Construct (PTC) in order to be able to process zinc dust instead of the treater dust. The facility never used zinc dust in the process and consequently the construction permit was canceled on October 26, 1990.

The January 9, 1991, letter from SSP to DEQ indicated that due to EPA regulations, SSP was switching the operation from treater dust and sulfuric acid to phosphate ore and lignosulfonate. The July 1, 1992, letter from D. Pitman to A. Elias (SSP information request) indicated that SSP did not apply for a PTC or permit applicability determination for the process alteration.

The September 3, 1985, stack test results showed that the measured PM emission rate from the scrubber stack was 6.04 pounds per hour at a production rate of eleven (11) tons per hour. The allowable PM emission rate, based on process weight rate, from that stack is 16.66 lb/hr. Several improvements had been made to the stack control system since the date of that test (see June 11, 1986, memorandum to Lee Stokes, July 8, 1986, memorandum to John Ledger, September 15, 1986, memorandum to file, and August 28, 1989, memorandum to Dave Pisarski). The improvements included the addition of new Venturis, installing a longer stack, addition of a new pressure pump, and addition of new sprays to the wet cyclone. Those improvements in the control system in addition to the fact that processing the new raw materials resulted in a much cleaner operation (September 6, 1991, and January 23, 1996, memoranda to Dave Pisarski), indicate that there was a decrease in the emissions from the scrubber stack and from other sources of the facility.

COMMENT #3:

Page 2, paragraph 3: The technical memorandum prepared for this proposed Tier II OP contains no technical analysis on the new raw materials nor does it reference other works which might contain the information.

DEQ RESPONSE:

The facility source file contains the Material Safety Data Sheets (MSDS) for lignosulfonate and for the phosphate ore. Phosphate ore and treater dust have similar chemical composition with a difference in the percentage composition of each component. For example the P_2O_5 percentage is about twenty-two percent (22%) in the treater dust and about thirty percent (30%) in the phosphate ore. Treater dust has higher concentrations of metals than does phosphate ore, which makes it more toxic. This was the reason why EPA regulations banned the processing of treater dust. SSP switched from treater dust to phosphate ore because of EPA regulations (SSP January 9, 1991, letter to DEQ). The silt content of phosphate ore is less than that of treater dust, hence the particulate emissions from processing phosphate ore is lower than that of the treater dust.

Lignosulfonate is a non-toxic, solid powder (see MSDS). This substance can be used as a commercial dust suppressant to control fugitive dust emissions especially at hazardous waste cleanup sites (see Standard Handbook of Environmental Engineering, by Robert Corbitt, 1989, pp 9.60). It is non corrosive and safer to handle and use than sulfuric acid which was used with treater dust by SSP before 1991. Lignosulfonate is a stable compound (MSDS). It may produce sulfur dioxide upon decomposition at high temperature, over 320° F, (personal communication with D. Rachor of Georgia Pacific). Sulfur dioxide is a pollutant commonly emitted from combustion sources. The temperature of the dryer at SSP is about 130° F which is much lower than the decomposition temperature of lignosulfonate. The dryer is used to remove the moisture from the lignosulfonate-phosphate granules, and no decomposition or chemical reaction is likely to take place at that temperature. SSP did not replace any of the process equipment since they started operation, and hence there was no increase in the facility throughput. The only equipment additions or modifications were to the pollution control system which decreased the emissions of that facility. In fact, changing raw materials from treater dust and sulfuric acid to phosphate ore and lignosulfonate had decreased the emissions from SSP. The September 9, 1991, inspection report and the January 23, 1992, memorandum from Rick Elkins to Dave Pisarski confirm that the production of lignosulfonate-phosphate is much less dusty, and has also reduced fugitive as well as stack emissions.

COMMENT #4:

Page 3, paragraph 3: No information is present in the public comment package that allows the calculation of the probable emissions from the facility's operation. Estimated emissions in the permit application are based upon a triple superphosphate process, AP-42, Table 6.10/2-1 (EPA 1993). This equation is irrelevant...

DEQ RESPONSE: The public comment package contains the production rate, the emissions factors, the reference for each emission factor, all the parameters which are used in the predictive equation, and the spreadsheet that shows all the calculations of all the emissions from point and area sources of the SSP plant. The Emission Estimates in page 2 of the technical memorandum indicates that DEQ estimated the emissions from all the sources of the facility. All the emissions limits are based on DEQ's calculations. The spreadsheet provided with the technical memorandum did not refer to Table 6.10/2-1 (1993). The calculations provided in the spreadsheet refer to Table 8.5.2-1, 5th edition of the AP-42 (triple superphosphate) emissions factors used in estimating the particulates and fluorides emissions from the pugmill, granulator, dryer, and cooler. The use of such emissions factors is a conservative approach due to the following:

- The total phosphate (P_2O_5) in the lignosulfonate-phosphate is about twenty-seven percent (27%) (1993 chemical analysis). Normal superphosphate, according to AP-42, contains not more than twenty-two percent (22%) of P_2O_5 . Triple superphosphate, according to AP-42, contains over forty percent (40%) P_2O_5 . So, using the triple superphosphate emission factor is a conservative, reasonable assumption and a good engineering judgement due to the following facts:
- The emissions factors in AP-42, 5th edition, Table 8.5.2-1 are to estimate emissions from the reactor, granulator, dryer, cooler, and screens. DEQ used the same emissions factors value to estimate the emissions from the reactor, granulator, dryer, and the cooler only. Emissions from the screens were estimated separately by using emissions factors from Table 11.19.2-2 in AP-42, 5th edition. Hence using of the emissions factors from Table 8.5.2-1, which includes the screening operations, is in fact overestimating the emissions from the scrubber stack.
- The new production process (lignosulfonate-phosphate) is a much cleaner process than the previous one, as documented by Rick Elkins, September 9, 1991, and January 23, 1992, inspection reports.

COMMENT #5: Page 4, paragraph 1: There is no information in the public comment package regarding the chemical composition of the raw materials or the anticipated chemical reactions that would occur at the extreme temperatures present in the process. This lack of information combined with emissions based upon non-representative operations is a fatal flaw in DEQ's decision making process. Neither the division nor the public have had the information necessary to make an informed decision regarding the impacts of this facility on air quality.

DEQ RESPONSE: As mentioned above, the facility source file contained the MSDS for the phosphate ore and for the lignosulfonate. The two substances are non-toxic. Phosphate ore is widely processed in the state of Idaho and in other states. Although the SSP process takes place at low temperature, and hence less emissions are produced compared to other phosphate processing facilities, SSP is using similar control measures as those used by other phosphate fertilizer manufacturers. The process description in the technical memorandum shows that lignosulfonate is used as a binder for the phosphate ore powder. The two components are mixed and milled together then proceed to the granulator. This part of the process occurs at low temperature. Granulated lignosulfonate-phosphate is then dried to remove the moisture from the product. Unlike the reaction of ore phosphate with sulfuric acid, no chemical reaction is likely to take place when using lignosulfonate.

COMMENT #6: Page 4, paragraph 3: The technical memorandum indicates that fluorides will be emitted from the facility, yet no fluorides emissions limits are referenced in the permit.

DEQ RESPONSE: The emissions of fluorides were estimated because fluorides are regulated air pollutant. SSP does not emit fluorides in sufficient amount to be major for that pollutant, therefore, the operating permit did not need to address fluorides to establish SSP as a synthetic minor. Further, Section 210 of the Rules applies only to new and modified sources, and Section 750 of the Rules does not apply to the SSP process. DEQ overestimated the emissions of fluorides from SSP because the change of the raw material and the operation at a low temperature fluorides emissions are expected to be much lower than it was before the change in the raw material.

COMMENT #7: Page 4, paragraph 4: The memorandum references to the rules for control of odors as a permit requirement. Again, this requirement is not reflected in the proposed Tier II OP.

DEQ RESPONSE: IDAPA 16.01.01.775 is a generally applicable state regulation, and according to the Operating Permit General Provisions Item E, this rule is applicable to all facilities in the state of Idaho including SSP.

COMMENT #8: Page 4, paragraph 5: The proposed Tier II OP lacks any control specifications for the stack emissions. These controls cannot set without conducting a stack test. Without this information, the public cannot thoroughly review the facility's impact on air quality and the division cannot determine if the control specifications are properly correlated to the emissions limits.

DEQ RESPONSE: The proposed Tier II OP requires: a) the pressure drop across the wet scrubber to be maintained within the manufacturer's specifications; b) that these specifications be kept on-site at all times; and c) that these specifications be available to Department representatives upon request. Manufacturer's specifications will guarantee that the scrubber will be operating at the control efficiency used in estimating the emissions from the scrubber stack. The calculated emission rates are in compliance with the Rules.

The enforceable operating conditions and monitoring and recordkeeping requirements for all pollution sources in SSP facility will assure that SSP will be in compliance with the emissions limits set in Appendices A and B of the proposed Tier II OP.